

## REMARKS

### The Amendments

The claims are amended to put them in a form more customary to US practice. The new dependent claims are supported by the original disclosure, for example, in the original claims and page 6, line 26, and page 7, lines 15-16.

The amendments do not narrow the scope of the claims. The amendments should not be interpreted as an acquiescence to any objection or rejection made in this application.

To the extent that the amendments avoid the prior art or for other reasons related to patentability, competitors are warned that the amendments are not intended to and do not limit the scope of equivalents which may be asserted on subject matter outside the literal scope of any patented claims but not anticipated or rendered obvious by the prior art or otherwise unpatentable to applicants. Applicants reserve the right to file one or more continuing and/or divisional applications directed to any subject matter disclosed in the application which has been canceled by any of the above amendments.

### The Rejection under 35 U.S.C. §101

The rejection of claim 10 under 35 U.S.C. §101 is believed to be rendered moot by the above amendments. It appears clear that the rejection was intended to be against claim 9, since it was a "use" claim and claim 10 is not. Claim 9 is now canceled.

### The Rejection under 35 U.S.C. §103 over Kondo

The rejection of claims 1-8 and 10 under 35 U.S.C. §103, as being obvious over Kondo (U.S. Patent Nos. 6,605,747 and 6,827,876 and U.S. Pub. No. 20020120168) is

respectfully traversed. The disclosures in these patents/publications are the same and thus will be addressed together with any references made to the '747 patent.

Kondo discloses a very broad generic formula (1d), col. 3-4. The formula is characterized by a central CF<sub>2</sub>O group bonded on either side to a cyclohexyl ring and a phenyl ring. Otherwise, the formula is open to a large and varied number of additional rings and possible substituents. An exemplification of possible additional rings in the Kondo formula is shown by 22 structures at col. 14-15. At col. 65 to 96, Kondo exemplifies 146 compounds within its generic formula (1d). The Kondo invention is actually most specifically directed to a method for preparing such compounds rather than to the compounds themselves; see, e.g., col. 4, lines 21-22, and the claims.

Kondo fails to provide any specific disclosure or direction to one of ordinary skill in the art of compounds within its broad generic formula (1d) which fall within or suggest a compound of applicants' formula I of claim 1. Only one compound of the 146 specifically exemplified by Kondo contains a dihydropyran ring as appears in formula I of instant claim 1; see, e.g., col. 77, compound 66. However, this compound is distinct from those of instant claim 1 because the CF<sub>2</sub>O and dihydropyran ring are connected through an ethylene group, not encompassed by the instant claims.

As was clearly set forth in In re Jones, 21 USPQ 2d 1941 (Fed. Cir. 1992), it is not the law that "... regardless of how broad, a disclosure of a chemical genus renders obvious any species which happens to fall within it." Instead, the disclosure must be considered as a whole as to whether it fairly suggests the claimed invention to one of ordinary skill in the art. See also, In re Baird, 29 USPQ2d 1550 (Fed. Cir. 1994). In Baird, the reference disclosed a generic formula having several variables each having a range of possibilities such that the generic formula encompassed a very large number of compounds. There was nothing in the

reference to suggest the specific selection of variables necessary to arrive at a compound of the claims being rejected and the Court stated that the reference actually indicated a preference for compounds distinct from those being claimed. Therefore, the Court concluded that the reference did not fairly suggest a compound within the claims and, thus, the reference did not render the claimed invention *prima facie* obvious.

Applicants respectfully submit that the instant facts are analogous to those in Jones and Baird and that Kondo fails to render the claimed invention *prima facie* obvious. Kondo discloses a very broad generic formula. Kondo's formula encompasses the option of four additional rings, A<sup>1</sup>-A<sup>4</sup>, and at least 22 possible selections for such rings. These rings may or may not be present. In addition Kondo encompasses a variety of possible bridging groups, Z, and these also may or may not be present. The potential combinations of such variables lead to an extremely large number of possible compounds. Within such extremely broad genus, there is no direction to one of ordinary skill in the art to make the selections necessary to arrive at a compound of applicants' formula I. There is no particular direction to select a dihydropyran ring from among the 22 examples given by Kondo as one of the A rings. As pointed out above, only one of the 146 structures to which Kondo gives particular direction has a dihydropyran ring. Further, there is no direction to provide a compound having a dihydropyran ring in the manner of applicants' formula I. The one compound of Kondo having such a ring does not otherwise meet the structure of applicants' claim 1. Thus, as in Baird, there is no direction to one of ordinary skill in the art to select from Kondo's broad genus a compound of applicants' formula I. Further, as in Baird, the reference actually directs one of ordinary skill in the art to select compounds distinct from those of applicants' formula I. The vast majority of the 146 compounds taught by Kondo contain only cyclohexyl or phenyl rings. Further, about two-thirds of the 146 compounds taught by Kondo (see

compounds 52-146) contain the CF<sub>2</sub>O group, not as a direct bridging group but as part of an alkylene or alkenylene bridging group. In view of the failure of Kondo to direct one of ordinary skill in the art to select from its vast genus of formula (1d) any compound meeting applicants' formula I and, in fact, in view of its direction to one of ordinary skill in the art to select structurally distinct compounds from such genus, applicants respectfully submit that Kondo fails to fairly suggest the claimed invention to one of ordinary skill in the art. Thus, there is no *prima facie* case of obviousness in accordance with Jones and Baird and the 35 U.S.C. §103 rejection should be withdrawn.

#### **The Rejections under 35 U.S.C. §102 and §103 over Heckmeier**

The rejections of claims 1-2, 4-8 and 10 under 35 U.S.C. §102, as being anticipated, or under 35 U.S.C. §103, as being obvious, over Heckmeier (U.S. Pub. Nos. 2003/0234384, 2004/0112275, and 2005/0040365) are respectfully traversed. The disclosures in these patents/publications are the same and thus will be addressed together with any references made to the 2003/0234384 publication.

The US filing/102(e) dates of the Heckmeier publications are after applicants' claimed foreign priority date. A certified copy of the priority document was received from the International Bureau, as noted in the Office Action. Applicants intend to submit a verified translation of the priority document for the purpose of the PTO verifying that it supports the current claims. Assuming such support, the Heckmeier references will be removed from the prior art. An INPADOC search revealed no publications of applications internationally in the Heckmeier family prior to applicants' claimed foreign priority date.



### **The Provisional Obviousness-type Double Patenting Rejections**

The provisional obviousness-type double patenting rejections of claims 1-2, 4-8 and 10 over each of copending Application Nos. 10/359,282, 10/936,660 and 10/673,909 are respectfully traversed. It is noted that Ser. No. 10/936,660 has issued as U.S. Patent No. 7,056,561 and Ser. No. 10/673,909 has been allowed but not yet issued.


Since there are other outstanding rejections in the instant application and the claims may be amended in a way which avoids these grounds of rejection, overcoming the rejection by the filing of a terminal disclaimer, for example, would be premature at this point. Thus, applicants hold in abeyance such action until the claims are otherwise found allowable.

It is noted, however, regarding Ser. No. 10/673,909 that it provides a very broad generic formula IA alleged to encompass the compounds of applicants' formula I. For the reasons similar to those provided above in traversing the rejection over Kondo, applicants respectfully submit that the broad formula IA in the '909 claims does not fairly suggest the compounds of the instant claims to one of ordinary skill in the art. Thus, the instant claims are not an obvious variant of the copending '909 claims. For this reason, the obviousness-type double patenting rejection as to this application should be withdrawn.

It is submitted that the claims are in condition for allowance. However, the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

  
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